

INVESTIGATING DUAL LANGUAGE MODELS: A CASE STUDY

An Undergraduate Research Scholars Thesis

by

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ABSTRACT

Investigating Dual Language Models: A Case Study (May 2015)

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The general purpose of this research was to identify the characteristics, along with differences, of the dual language (DL) programs in elementary schools in two central schools in Texas. A secondary purpose was to analyze test scores over time of implementation on each campus within the districts that employs the DL model(s). Scores were accessed via state open-access databases to determine achievement patterns of such programs and types. A tertiary purpose was to investigate the number of students in the DL programs that also are served in gifted education programs.

Every school has its own unique methodology and curriculum when it comes to DL education; as a result there is no certain consensus on which method works best (Lindholm-Leary, 2007). By investigating specifics such as state assessment results and gifted and talented ratios, I had quantitative data that pointed to which method that may yield the best results for students. I also was able to analyze and report qualitative, descriptive data about each program type within the schools. This research will provide valuable data about DL programs and may likely impact the DL curriculum that schools and school districts will decide to implement in their programs for second language learners.

DEDICATION

I dedicate this thesis to you, my family. As I move through this journey that is college, I remember the faith that you have had in me throughout everything that I have gone through in my academic journey. When things begin to get difficult, I know that you are with me along the way, despite the geographical distance. Everything I do, I do first and foremost with thanks to God and the support system that He has given me every step of the way. Again, thanks to you, my loving family. I love you all.

ACKNOWLEDGEMENTS

I acknowledge my mother, sister, grandparents and uncle, Daisy Clemente, Aileen Mendoza, Julia Colón, Pablo Clemente, and Pablo Clemente-Colón, because they have always believed in me. I also acknowledge my teachers along the way; they all have inspired me to pursue this career that is Bilingual Education. Through their support and encouragement as I grew up, I shall strive to be as inspiring to my students as they all were to me.

I would also like to thank Dr. Irby, Dr. Lara, Dr. Arizpe, and David Jimenez for imparting me with the wisdom and courage to take on all of this. I thank them for being mentors and allowing me to learn from their vast experiences; without them this would have been impossible.

CHAPTER I

INTRODUCTION

Within a 30-year time period, the population of English language learners (ELLs) has increased in the United States from 4.7 to 11.2 million between 1980 and 2009 (National Center for Education Statistics [NCES], 2011). There has been quite a debate regarding the type of educational program that would be most beneficial for ELLs over those 3 decades. While transitional bilingual education programs are known to be effective at educating minority-language students, dual-language programs may prove to be even more effective (Lindholm-Leary, 2005; Lindholm-Leary & Howard, 2008; Thomas & Collier, 2002). There are different types of dual language programs, one-way and two-way programs. Both programs are becoming more and more popular. In the two-way dual language program, not only is it offered to ELLs, but also it is offered to proficient English speakers (Christian, Howard, & Loeb, 2000). Why has there been a sudden increase in interest in the dual language program? The dual language program offers students the opportunity to be biliterate American citizens. Wilson (2014) promoted what former Secretary Riles in which he indicated that knowledge of language is power. Over the past 10 years, according to the National Association of Bilingual Education, dual language programs have grown tenfold (Wilson, 2014).

Research Questions

My research in this area produces a case study on dual language programs in two school districts in central Texas. I responded to the following questions:

1. What are the characteristics of the dual language programs in two school districts, School

District A and School District B?

2. What differences exist between/among all the types of dual language programs in those two districts?

3. How have test scores over time changed with the implementation of dual language programs on each campus in the districts?

4. How many students in the dual language program also are served in gifted education programs in the districts?

Significance of the Study

Every school has its own unique methodology and curriculum when it comes to DL education; as a result there is no certain consensus on which method works best (Lindholm-Leary, 2007). By investigating specifics such as state assessment results and gifted and talented ratios, I can have quantitative data that can point to which method may yield the best results for students. I will also be able to analyze and report qualitative, descriptive data about each program type within the schools. I have provided data about DL programs that may likely impact the DL curriculum that schools and school districts will decide to implement in their programs for second language learners. This may also serve as a tool for future educators when deciding which path to take when it comes to Bilingual Education. There are many models that can be followed, and many variations within that model, this study aims to report which method produces the best results in the long run for the students.

Statement of Purpose

The first purpose of my study was to determine the characteristics of the dual language programs in two school districts in Central Texas. The second purpose was to define the differences between/among all the types of dual language programs in the two districts. The third purpose was to compare the test scores over time of implementation on each campus that employs the dual language model(s) via the use of state open access databases. The fourth purpose was to determine the number of students in the dual language program that are simultaneously served in gifted education.

The data from my study were from the AEIS database and interviews held with district officials. The overall goal of the research was to provide valuable data about DL programs to future and current teachers, administrators and districts to inform them of the long-term effects of the implemented programs. Human Subjects Approval was not necessary as the questions asked of the officials revolved around district and school level programmatic questions, and I used the open-access state database.

Definitions of Terms

It is important to establish a certain vocabulary when pertaining to the research being done. The following words will be used frequently though out the course of this case study.

English Language Learner (ELL)

English language learner (ELL) refers to students who initially learned another language before learning English. These students could be immigrants or born in the United States. Although

these students may have some grasp of the English language, they were not proficient English speakers when they entered school.

Dual Language (DL)

Dual Language (DL) programs are a form of education in which students are taught literacy and content in two languages. This term will be used in frequency in this Dual Language Case study when referring to the program models that the schools implement in both districts.

L1

L1 refers to a student's first language learned or native tongue. In this study, this could be English or Spanish depending on the Dual Language model.

L2

L2 refers to the student's second language or the language being learned. In this study this could be English or Spanish depending on the Dual Language model.

Organization of the Study

Chapter I of this study contains the Introduction of the study and includes the research questions, significance of the study, statement of the purpose, and definition of terms. Chapter II of this study consists of the literature review and includes research studies on Dual Language models, and features of Dual Language programs. Chapter III of this study consists of the methods context of the study, participants of the study, and instruments used. Chapter IV of this study

consists of the results and conclusion, along with a summary and discussion for further implications.

CHAPTER II

LITERATURE REVIEW

There are different types of dual language programs, one-way and two-way programs. Both programs are becoming more and more popular. In the two-way dual language program, not only is it offered to ELLs, but also it is offered to proficient English speakers (Christian, Howard, & Loeb, 2000). Why has there been a sudden increase in interest in the dual language program?

Dual Language Defined

The definition of one-way immersion education is an educational approach that provides content instruction and literacy instruction specifically for language minority students. By contrast, two-way immersion education is an educational approach that integrates language minority and language majority students for all or most of the day, and provides content instruction and literacy instruction to all students in both languages. (Lindholm-Leary, 2000, 2005). Most districts have these programs set in stone as their main form of bilingual education due to their high success rates. Dual Language education, both one-way and two-way, aim to develop and empower bilingual bi-literate students, develops a cross-cultural understanding and requires parental permission along with active parental involvement (Freeman, 2005).

Research Studies on Dual Language Elementary Programs

Research studies on DL programs have increased dramatically. Although various programs share common characteristics, they vary in several seemingly small yet important aspects. There are many things to take into consideration when observing the characteristics of a dual language

model. For example, there are programs that focus on students who are only proficient in Spanish, and there are programs that require an even number of Spanish speaking students and English speaking students; students may be identified with a learning disability, some may be gifted, and even some students may lack the parental support that is required to make a program such as this successful. The most famous study on dual language education was conducted by Thomas and Collier (2004). They indicated that dual language programs yield the best results for ELLs and such programs actually close achievement gaps between ELLs and native English-speaking students.

Dual Language Models

50/50 and 90/10

The two basic dual language models that are mainly observed are the 90/10 and the 50/50 models (Freeman, 2009). The 90/10 is the model in which most instruction in the lower grade levels are provided in the minority language with a slow, yet gradual increase in the majority language instruction (Trueba, 1979). By the third and fourth grade the 50/50 balance is reached and both languages are used equally in the classroom both in instruction and in content (Freeman, 2005). The 50/50 model begins from the primary grades and is adhered to throughout the elementary grades. Despite of what model, is being used or whether it is one-way or two-way immersion it is imperative to note that in order for a DL program to be successful it must be adhered to for the full span of the child's elementary school years. (K-5) (Freeman, 2009).

The Gomez/Gomez Model

The Gomez/Gomez model is a unique 50–50 model that divides language of instruction by content area as well as by time that is implemented in various states, and in several cities in Texas. It requires extensive training and must be adhered to precisely. The model contains several key components designed to support the full development of content-area biliteracy: (Dual Language Training Institute) (a) it provides instruction of subject areas in only one of the two languages. This, combined with what is called “vocabulary enrichment” in the opposite language allows developmental, conceptual and linguistic connections to be formed that enable the way students think through subjects in their L2, (b) it calls for conceptual refinement activities that supports the learning of content in the L2 and promotes academic intensity. This supports the model because it allows for a better understanding of the concept, and it helps develop the language of that subject, (c) it promotes the development of content-area biliteracy by the end of 5th grade through specialized content-area vocabulary enrichment activities conducted once a week for about 30 minutes. These activities are games and fun activities designed to expose learners to previously learned vocabulary in the opposite language of instruction of that subject area, (d) it uses the concept of bilingual pairs for increased student engagement in all classroom learning activities. This is the central component of the model; the pairing changes regularly and learners who are dominant in English are paired with learners dominant in Spanish. According to Freeman and Freeman (2001), cooperative learning allows for students to be motivated and encouraged to collaborate with each other and use different modes of learning by using their own knowledge and working through

challenges with their peers, (e) it uses bilingual learning centers (PK-second grade) and bilingual research centers (beginning in third grade). Bilingual learning centers are established in all classrooms and are labeled in both languages. These places allow for meaningful and task oriented work that is project based, (f) it requires the use of *language of the day* for non-instructional school language used throughout the day. The purpose of “language of the day” is to promote bilingualism across the campus and to develop vocabulary in both languages.

What Makes DL Work

According to Collier (1996), there is no one thing that could possibly make the DL language program successful. There are many attributes that should be taken into consideration such as administrator’s goals, community support, and teacher reflections and experiences in the classroom. Administrator’s goals play a huge role in the success of a DL program. If the administration is concerned and invested into the integration of diversity and a culturally rich classroom environment, the teachers can continue teaching their class knowing they are supported. Community support is another thing that has been attributed to making DL instruction more successful. Teachers who used culturally integrative techniques and were fully aware of the community recourses of the students were best able to implement student-centered approaches in the classroom making it a more beneficial learning experience for the students by allowing them to establish those connections. Teacher reflections and experiences is attributed to making DL instruction more successful due to the fact that observation is keen in newly implemented programs. Teachers who are implementing a program must adhere to strict rules in order to be effective, but must also be practical with their methods. Lets use the example of a teacher in a

Central Texas school who teaches fourth grade Dual Language Reading and Writing. The class is working on a “How to” essay. If the model of DL that was being used were a model that involved alternating language every other day, the writing process would be disturbed. There would either need to be two writing prompts (one in each language) or a different solution. This teacher, instead of alternating on a daily basis, when working on essays with her class had to adjust the Spanish /English schedule in order to keep it 50/50, but only in the specific subject. This is something that is seen quite frequently in DL instruction for a variety of reasons that we will be discussing next.

Features of Dual Language Programs

Dual Language programs must follow consistent and clear linguistic, sociocultural and pedagogical policies.

Linguistic

In Dual Language classrooms there are certain linguistic policies that should be abided by strictly being: (a) there should be a strict language separation, this could be by alternating days, half days, subject areas, weeks, or even teachers, (b) there should be equality in the language distribution, the time on instruction in each language should be divided 50/50 (c) there should be bilingual groups, also known as heterogeneous or one dominant student per language, (d) academic language and academic vocabulary should be taught through the content, (e) simultaneous translation should be avoided at all times. (Torres-Guzman, 2002) If children know that the content will be translated for them they will not dedicate any effort to learning the new language.

Sociocultural

Sociocultural are practices, customs, and beliefs that exist within groups or populations. An immense part of what makes up successful Dual Language models are it aims to creating bilingual and bicultural students. This is done through, (a) appreciation of cultural diversity through the process of both cultures learning a new language, (b) culturally and relevant teaching methods through the acknowledgement of the culture and life experience that students bring into the classroom, (c) development of self-esteem is established because both the English speaking students and the Spanish speaking students are learning the minority language, sending the message that the minority language has a great value, (d) mix of language minority with English-speaking and mainstream students, (e) cooperative group learning structure, (f) parental involvement is essential, they must trust and support the process and commit to it, (g) and School/ community support structure. (Torres-Guzman, 2002)

Pedagogical

Dual Language programs require a long-term commitment, and as a result of this schools aim to design programs that attend to the needs of these specific students by offering: (a) academic achievement for all children allowing students to develop a strong foundation in their native language while simultaneously immersing them in a new one, (b) developmental level team teaching structures in which subjects or languages are split between teachers, (d) thematic organization of units of study are very effective in dual language classrooms because of the team teaching structure (Freeman & Freeman, 2009). It allows for a concept to be touched upon by all the subject areas allowing students to form connections in both languages and in their everyday

lives, (e) teachers as monolingual models are important in an attempt to avoid translation.

Teachers make a decision at the beginning of the year to teach certain units, or subjects in a certain language to avoid the issue, (f) and ongoing staff development. (Torres-Guzman, 2002)

Different Subjects

Different subjects in DL instruction require different considerations. Subject area instruction requires consistency. This is due to the need of conceptual and vocabulary development. Like the teacher from central Texas mentioned above, if instructions was not adjusted, the students could have suffered academically due to lack of stability. When teachers use one language for a subject area they allow for students to make conceptual and linguistic connections with the subject matter. (Freeman, 2005)

Mathematics

In many studies, mathematics was selected to be the ideal subject to be delivered in English-only for several reasons: (a) Mathematics books have more limited (English language) text than science or social studies texts; (b) Mathematics is generally a more hands on subject, with numerous manipulatives available to help enhance understanding; (c) Mathematics is thought as universal, its content cuts across languages; and (d) If the students parents are Spanish-speaking they will still be able to help their children with this mathematics homework, more so than they would be able to help if another subject were strictly in English. (Freeman, 2005)

Social Studies and Science

Due to their more extensive reading, science and social studies are more likely to be delivered predominantly in Spanish in a 50/50 model. The amount of time in mathematics each day is equal to the amount of time it takes for both social studies and science lessons to be taught. (Freeman 2005)

Reading/Language Arts

The need for academic literacy, and academic language in both languages is very important when it comes to DL education. The students following this curriculum encounter academic language in both English and Spanish, which according to studies is like learning four languages on its own. (Johnson 2009) That is one of the main reasons why Reading/Language Arts is taught in both languages. In order for students to continually learn in all subjects, they must be exposed to new texts in both languages and encounter new vocabulary in order to expand on what they know. The effects on the different subjects at hand (Reading/Language Arts, Math, Social Studies, and Science) and their state assessments are what are observed later on in this case study.

CHAPTER III

METHODS

The first purpose of my case study was to determine the characteristics of the dual language programs in two school districts in Central Texas. The second purpose was to define the differences between/among all the types of dual language programs in the two districts. The third purpose was to compare the test scores over time of implementation on each campus that employs the dual language model(s) via the use of state open access databases. The fourth purpose was to determine the number of students in the dual language program that are simultaneously served in gifted education. The research design that I chose to use is a phenomenological case study research design is descriptive, rather than explanative, and the case study component is the exploration of the two districts (Lunenburg & Irby, 2008)

Context of the Study

The study took place in a central Texas location within two school districts. The first school district (named District A) includes services from Pre-kindergarten through twelfth grade. The district serves 54% Hispanic students, 25% White students, and 20% African American students (remaining 1% other or mixed races). In 2013-2014, District A serves 74% economically disadvantaged students and 20% English language learners (AEIS, 2014).

The second school district (named District B) includes services from Pre-kindergarten through twelfth grade. The district serves 21% Hispanic students, 54% White students, 7% Asian, and 14% African American students (remaining 4% other or mixed races). In 2013-2014, District B

serves 35% economically disadvantaged students and 7% English language learners (AEIS, 2014).

Participants of the Study

The participants in this study are two district administrators who work in the dual language programs. They volunteered their time (approximately 45 minutes) to share information about the program. No personal questions were asked; nor were questions asked about specific teachers. The information provided was strictly programmatic. Permission was granted by the district to ask questions about the programs.

Instrument

The instrument used in this case study was a 17-question interview protocol. The interview protocol is depicted in Table 1. The interview questions were validated for face validity by being reviewed by two expert judges who had knowledge of bilingual education programs. They provided feedback on the protocol. Their feedback dealt with (a) making the questions open-ended, (b) clarifying the questions, and (c) insuring the questions were only about the programs.

Table 1.

Interview Protocol

Questions for Interview

1. Can you describe the Dual Language Program in your district?
 2. In what ways do principals display their pride in having Dual Language programs in their schools?
 3. How are principals trained in Dual Language Education in your district?
 4. How does your District train teachers in Dual Language Education?
 5. Do the school libraries carry books in both languages? What do you think the percentage of English/Spanish books is?
 6. What percent are certified in bilingual education or ESL of those who teach in Dual Language?
 7. When you hire teachers how do you ensure that they have a comprehensive understanding of bilingual educations philosophy and methodologies?
 8. How is the curriculum varied and challenging in the Dual Language Program?
 9. Is there any flexibility in the implementation of the curriculum?
 10. How does the community support the Dual Language program?
 11. How does the administration support Dual Language?
 12. Do the schools display student's work in both languages and where is that displayed?
 13. Do you think that for these programs students have better attendance than in other a regular classroom?
 14. How does the Dual Language program involve parents?
 15. How do students get in the program?
 16. Do you have a waiting list?
 17. How did the program in your district get started and when was it implemented? Is it in Board Policy? May I have a copy of the Board Policy on Dual Language Education?
-

Additionally, the Texas Education Agency Academic Excellence Indicator System (AEIS) and the Texas Education Agency Texas Academic Performance Report (TAPR) were reviewed on specific years (prior to, midpoint, and current year). Specific schools within each district were reviewed for reading, writing, math, and science scores from the state exams. These data are publicly accessible.

Data Collection

Data were collected using the Interview Protocol that was shown in Table 1. Each bilingual administrator was contacted via phone to request a 45-minute interview time. Each administrator agreed to the face-to-face interview. I wrote all answers in detail on the protocol; nothing was audio or video recorded. After the interview, I typed the responses while they were fresh in my memory. Other data were taken from the Texas Education Agency's public website for the Academic Excellence Indicator System (AEIS) and the Texas Academic Performance Reports (TAPR). Additionally, the districts' websites were reviewed, as they are also publically accessible.

Data Analysis

Data were analyzed qualitatively in this case study. District A's and B's interview data will be reported by interview questions, but also will be analyzed to respond to each of the research questions. The research questions for this study are as follows:

1. What are the characteristics of the dual language programs in two school districts, School District A and School District B?
2. What differences exist between/among all the types of dual language programs in those two districts?
3. How have test scores over time changed with the implementation of dual language programs on each campus in the districts?
4. How many students in the dual language program also are served in gifted education programs in the districts?

Additionally the public data bases of the Texas Education Agency (Academic Excellence

Indicator System; AEIS) were reviewed to determine the three time points of data related to reading, writing, mathematics, and science (if the DL program went through fifth grade). Percent passing scores by grade levels and content subject areas tested were recorded and comparison charts by schools with DL programs within the districts were created.

CHAPTER IV

RESULTS AND CONCLUSIONS

This chapter includes a summary of my study. In addition, I graphically display the results and provide a discussion of the findings and the conclusions of the data. Ultimately, I provide implications for future practice. The purpose of my study was to determine the characteristics of the dual language programs in two school districts in Central Texas. The second purpose was to define the differences between/among all the types of dual language programs in the two districts. The third purpose was to compare the test scores over time of implementation on each campus that employs the dual language model(s) via the use of state open access databases. The fourth purpose was to determine the number of students in the dual language program that are simultaneously served in gifted education.

Discussion of Findings

Research Question One

What are the characteristics of the dual language programs in two school districts, School District A, and School District B?

The data that were used to answer this question were collected from public websites, and interviews with district officials from each district. The 17-question interview protocol that was mentioned in chapter three provided me with the characteristics of each district.

School District A began its Dual Language program in 2001, School District A used the 90/10 Dual Language instructional model in School 1, in which 90% of school instruction is delivered

in Spanish and 10% of the instruction, is in English. This framework is alternated weekly, making it 90% in English and 10% in Spanish the next week, therefore virtually all courses are taught in both languages. Students receive reading instruction in their native language. School 2 in School District A uses a 50/50 instructional model in which 50% of instruction is delivered in English and 50% is delivered in Spanish. This school district offers the two-way Dual Language program in two elementary schools, one-way Dual Language program also referred to as a Transitional Bilingual model in eight of their elementary schools, and an Immigrant Program for students who are in middle school. The goal of these programs is to nurture the students' native language, while teaching them English to prepare them for their middle school and high school education.

School District B began its Dual Language Program in 2002, School District B uses the Gomez/Gomez 50/50 model in all of its schools, in which 50% of the instruction is delivered in English and the other 50%, is delivered in Spanish. School District B offers the two-way Dual Language program in two pre-schools, three kindergarten through fourth grade Elementary Schools, and in one Intermediate school (5-6th). Because this is the only bilingual program the district offers, Dual Language Pre-K instruction follows the 90/10 model, in which 90% of instruction is in the student's native language, in order to create a strong foundation in their native language.

Both programs allow students who are ELL to be in the programs, and English-speaking students complete an application and are assessed for their English language proficiency before being accepted. The application process occurs during the students first year in kindergarten, because of the large amount of success that these types of programs have displayed in creating bilingual, biliterate, and bicultural students there is even a waiting list of native English-speaking students

who would like to be in the program.

Research Question Two

What differences exist between/among all the types of dual language programs in those two districts?

The data that were used to answer question two were taken from the public websites, and interviews with district officials from each district. There are various differences that exist among the types of dual language programs in the two districts. In School District A alone there exist two different two-way Dual Language models, and one-way Dual Language classes that aim to transition students into classes that are predominantly English speaking. One difference is that they offer an Immigrant Program for their students. This center, helps ease new students through the transition of moving to a new country, provides support, and tutoring services.

Another is that School 1 in School District A uses the 90/10 model, alternating weekly, and School 2 in School District A uses the 50/50 model. School District B only offers two-way Dual Language programs, meaning that every student that receives bilingual services through this district has the opportunity to become biliterate and bicultural. They are not going to be in a transitional, or early exit bilingual program. In addition to this, School District B offers the Dual Language program beyond elementary school and through Intermediate school, something that is not offered in many districts. Schools in this district implement the Gomez/Gomez model that was mentioned in Chapter II.

Research Question Three

How have test scores over time changed with the implementation of dual language programs on each campus in the districts?

The Discontinuation of the Two-way Dual Language Curriculum

The data that were used to answer question three were taken from the public websites, and interviews with district officials from each district, and the Academic Excellence Indicator System (AEIS) state public database.

One thing that was discussed during an interview was the change of Dual Language program that occurred in a school in District A. This school, referred to as School 3, transitioned from the two-way DL model, to the one-way DL model. The two-way model was discontinued, and this made me wonder how that change affected the ELL students who attended this school. In 2009, School 3 had an exceptionally high percentage of students passing standardized tests. Students were learning content and vocabulary in two languages, and their native language was being fostered. (Gomez, 2001). In addition to this, self-esteem was fostered, and they were exposed through their minority language daily due to their peers. (Torres Guzman, 2002) All of these were diminished when the two-way Dual Language model was discontinued, and as seen, ELL's test scores suffered.

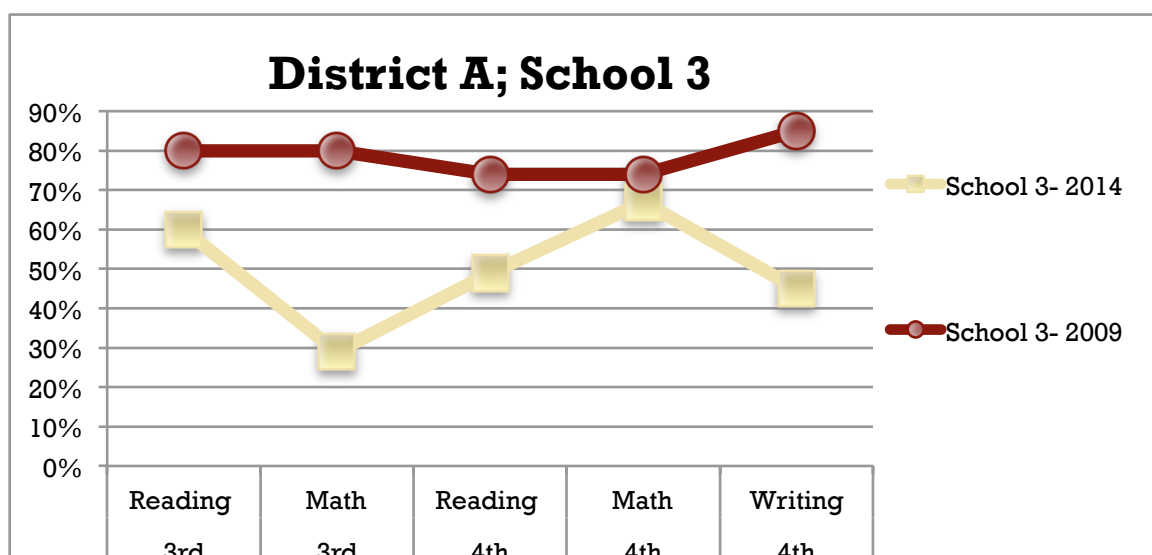


Figure 1. Results of discontinued two-way DL curriculum in a school (AEIS 2014)

Importance of Continuation Beyond Elementary School

One difference between the two districts that was mentioned in the answer to research question two, was that School District A provides only one-way Dual Language programs beyond elementary school, and School District B provides the two-way Dual Language program through Intermediate school. According to AEIS, in School District A, 51% of students passed the Reading Assessment and 22% passed the Math Assessment. In School District B, the students who attended a Dual Language Intermediate School, 69% of students passed the Reading Assessment, and 89% of students passed the Math Assessment. Dual Language programs require commitment; these results show the impact of a consistently implemented a model from grades Pre-K through 6th.

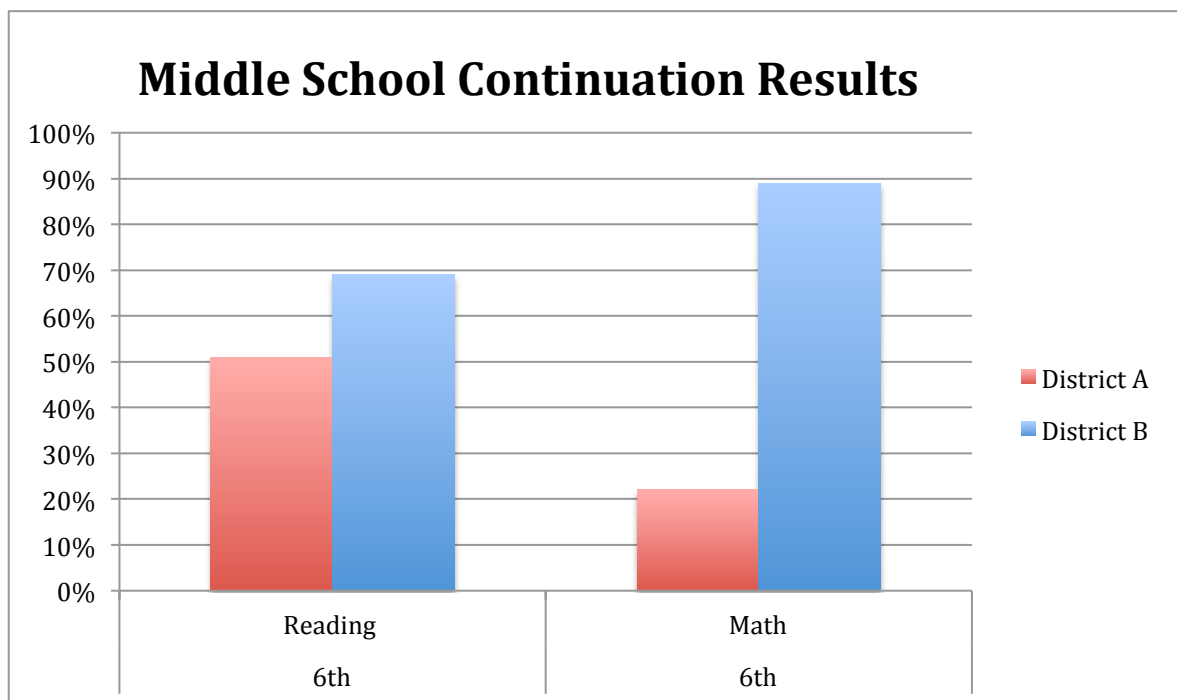


Figure 2. Importance of continuation beyond elementary school

Comparison of Dual Language Models

In this case study, three different models were described. There are various differences that exist among the types of dual language programs in the two districts. In School District A alone there exist two different two-way Dual Language models. School District A used the 90/10 Dual Language instructional model in School 1, in which 90% of school instruction is delivered in Spanish and 10% of the instruction, is in English. This framework is alternated weekly, making it 90% in English and 10% in Spanish the next week, therefore virtually all courses are taught in both languages. Students receive reading instruction in their native language.

School 2 in School District A uses a 50/50 instructional model in which 50% of instruction is delivered in English and 50% is delivered in Spanish. The 50/50 model begins from the primary grades and is adhered to though out the elementary grades. School 4 in District B uses the Gomez/Gomez model, a unique 50–50 model that divides language of instruction by content area as well as by time.

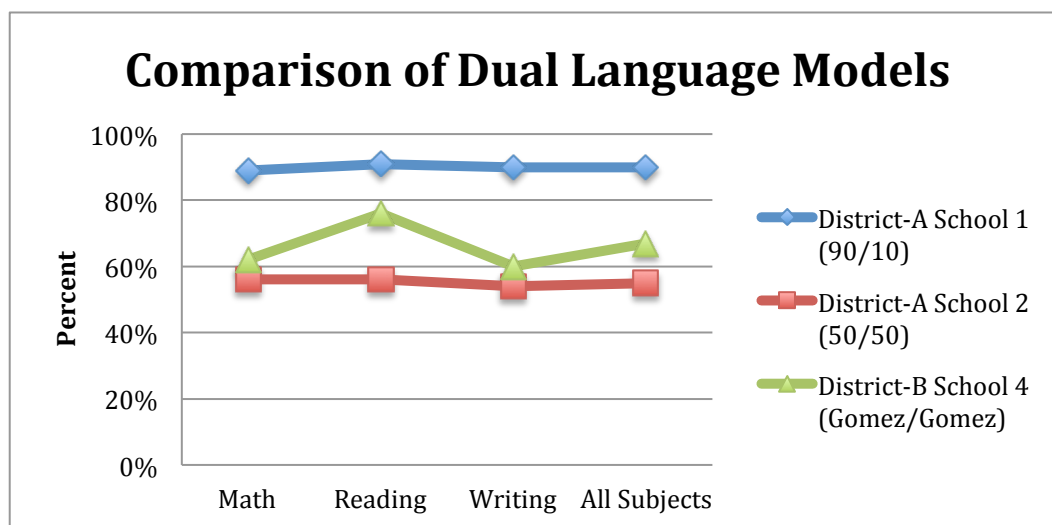


Figure 3. Comparison of dual language models

According to the data, the Dual Language model that yields the best results, even compared to other models in its own district is the 90/10 model that is implemented in School District A, School 1. This school has shown promising results on its assessments and several distinctions from the state including Academic Achievement in Reading/English in which 100% of the ELL's passed their Reading Assessment in the fifth grade with a Satisfactory Standard or above. They also earned recognitions for Postsecondary readiness, and were in the Top 25 Percent of Student Progress, and Closing Performance Gaps.

Research Question Four

How many students in the dual language program also are served in gifted education programs in the districts?

The data that were used to answer question three were taken from interviews with district officials in which numbers of students were requested to see if there was a correlation between students from the dual language program over time who have also been served in gifted education programs.

In School District A, 3.7% of students were identified as served by both the Gifted Program, and the Dual Language Program. In School District B, 19.6% of students were identified as served by both the Gifted Program and Dual Language Program. There may be issues with the type of gifted program and the identification measures in School District A with so few students being served in the Gifted Program who are also in the DL Program. However, this may imply that a two-way program may yield more students in a Gifted Program.

Conclusion and Implications for Practice

Every school has its own unique methodology and curriculum when it comes to DL education; as a result there is no certain consensus on which method works best (Lindholm-Leary, 2007). By investigating specifics such as state assessment results and gifted and talented ratios, I can have quantitative data that can point to which method may yield the best results for students, and I was also able to analyze and report qualitative, descriptive data about each program type within the schools. This research provides valuable data about DL programs and may likely impact the DL curriculum that schools and school districts will decide to implement in their programs for second language learners. This may also serve as a tool for future educators when deciding which path to take when it comes to Bilingual Education. There are many models that can be followed, and many variations within that model, this study aimed to report which method produces the best results in the long run for the students.

It is recommended that school districts consider implementing the 90/10 two-way programs since that seemed to yield the highest student achievement. It is also recommended that the school districts consider an aligned identification matrix for identifying bilingual students for gifted education, which might improve the numbers of students who are identified. When school districts implement a dual language program, it is important to consider having the program go through at least sixth grade in order to yield the best achievement results for students in reading and in math. Ultimately, based on my findings, I would recommend that school districts consider implementing a two-way dual language program over a one-way dual language program to yield the best results for students. My findings are undergirded by the work of Collier and Thomas

(2004) who found that two-way dual language programs yield the greatest benefit for English language learners.

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